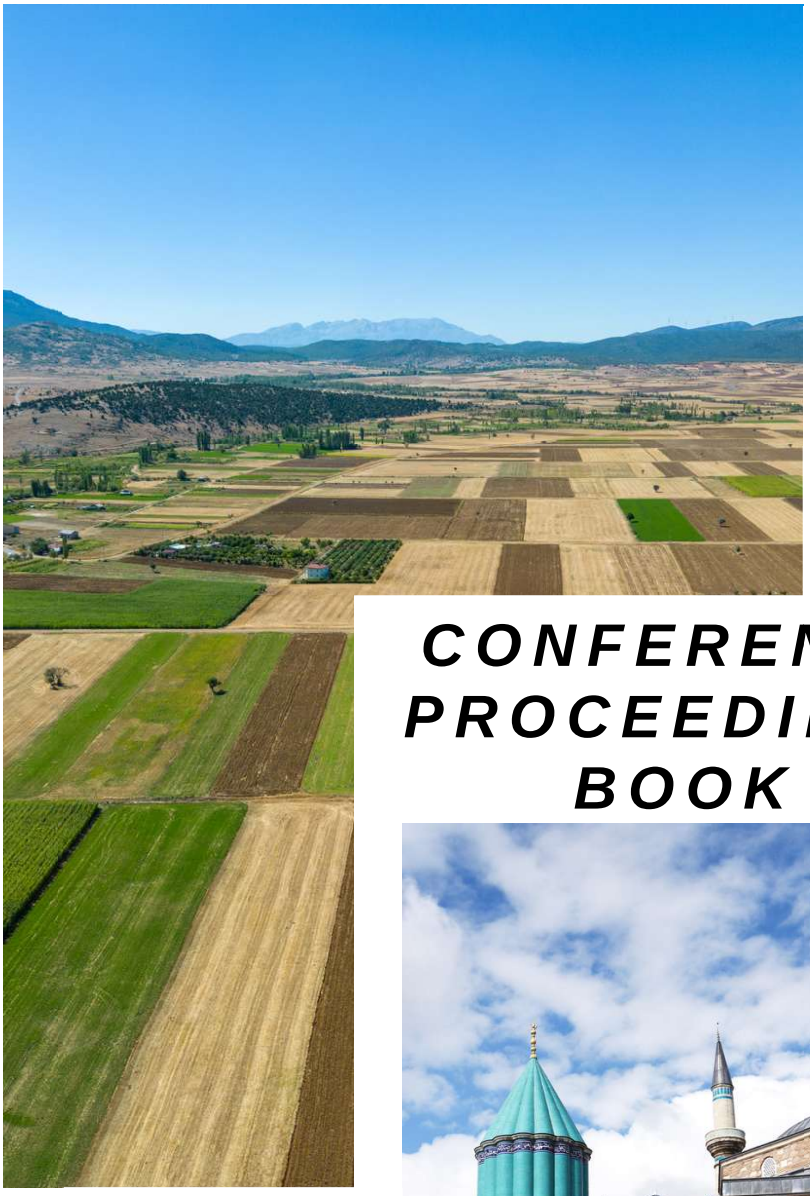
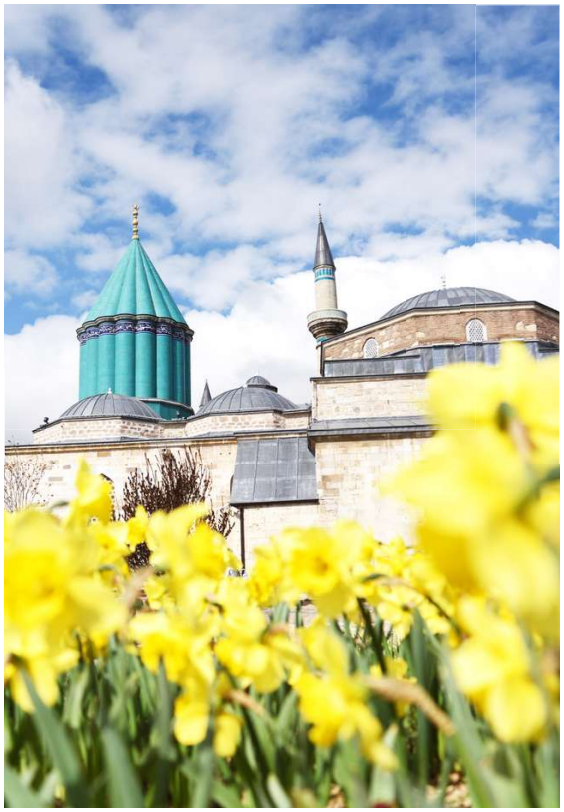
ISPEC
16. INTERNATIONAL CONFERENCE ON AGRICULTURE, ANIMAL SCIENCE & RURAL DEVELOPMENT

November 15-17, 2024
Konya, Türkiye



CONFERENCE PROCEEDINGS BOOK



EDITORS
Prof. Dr. Mustafa HARMANKAYA
Prof. Dr. Ercan CEYHAN
Assoc. Prof. Dr. Seyithan SEYDOŞOĞLU

ISPEC 16th INTERNATIONAL CONFERENCE ON AGRICULTURE, ANIMAL SCIENCE & RURAL DEVELOPMENT

ISPEC Publishing House

Institution of Economic Development and Social Researches

All rights of this book belongs to ISPEC Publishing House. Without permission of the publisher, can't be duplicate or copied. Authors of chapters are responsible both ethically and juridically.

(The Licence Number of Publicator:

2014/31220) Gölbaşı, Adıyaman Province,

TÜRKİYE

TÜRKİYE TR: +90 342 606 06 75 USA: +1 631 685 0 853

E mail: iksadyayinevi@gmail.com

www.iksadyayinevi.com

Copyright © 2024 by İKSAD publishing house All rights reserved

ISPEC 16th INTERNATIONAL CONFERENCE ON AGRICULTURE, ANIMAL SCIENCE & RURAL DEVELOPMENT

ISPEC 16th INTERNATIONAL CONFERENCE ON AGRICULTURE, ANIMAL SCIENCE & RURAL DEVELOPMENT

November 15-17, 2024 / Konya, Türkiye

PROCEEDINGS BOOK
(Abstracts & Full Texts)

EDITORS

Prof. Dr. Mustafa HARMANKAYA
Prof. Dr. Ercan CEYHAN
Assoc. Prof. Dr. Seyithan SEYDOŞOĞLU

Cover Design: Arzu Altuntaş

ISBN: 978-625-6080-48-5

DOI: https://doi.org/10.5281/zenodo.14502508

ISSUED: December 17, 2024

NEGLECTED AND UNDERUTILISED SPECIES (nus) AND SUSTAINABLE DEVELOPMENT

Dr. Hamid EL BILALI*(ORCID:0000-0002-0322-2034)
International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM-Bari), Via Ceglie 9, 70010 Valenzano (Bari), Italy
Email:elbilali@iamb.it

Prof. Dr. Lawali DAMBO
Department of Geography, Faculty of Letters and Human Sciences, Abdou Moumouni University, P.O. Box 237, Niamey, Niger
Email:lawali.dambo@gmail.com

Prof. Dr. Jacques NANEMA
Programme Agrinovia, Joseph Ki-Zerbo University, 03 BP, 7021 Ouagadougou, Burkina Faso
Email:jacquesnanema@yahoo.fr

Dr. Filippo ACASTO
Italian Agency for Development Cooperation (AICS), Ouaga 2000 - Secteur 54, Arrondissement n. 12, Ouagadougou, Burkina Faso
Email:filippo.acasto@aics.gov.it

Abstract

Neglected and underutilized species (NUS) – also called 'orphan', 'minor', 'abandoned', 'lost', 'traditional', 'alternative' or 'niche' crops – include thousands of crops to which little attention is paid or which are entirely ignored by plant breeders, agricultural researchers and policymakers. However, NUS seems to have a huge potential that is largely unexploited. This review analyses the relationship between crop NUS and sustainable development. Evidence shows that crop NUS can help addressing many environmental and socio-economic challenges facing humanity such as climate change, livelihoods vulnerability and poverty, malnutrition and food insecurity, biodiversity loss and ecosystem degradation. Therefore, NUS can also represent a significant contributor to the 2030 Agenda for Sustainable Development (cf. Sustainable Development Goals) and Paris Climate Agreement. However, despite the noted potential and benefits of NUS, gaps in knowledge, research and development hinder their promotion and exploitation. Therefore, there is an urgent need to strengthen research on NUS within the Agricultural Knowledge and Innovation Systems (AKIS) and develop their value chains. Multi-stakeholder efforts (public, private, civil society) are needed in different arenas (policy, research and practice) and at all levels (local, national, regional, international). They must adopt a food chain approach and address production (cf. breeding, fertilisation and soil fertility management, pest management), processing, distribution and marketing, and consumption. Initiatives such as SUSTLIVES project in Burkina Faso and Niger represent a promising contribution to these multifaceted and integrated efforts to promote NUS in order to bring about transition to sustainability agri-food systems and contribute to sustainable rural development in the Sahel.

Keywords: Orphan crops, Sustainable food systems, Sustainable Development Goals, Food security, Climate change.